

Remarks

Claims 1-28 are presented for reconsideration, with claims 1, 14, 21, 27, and 28 being the independent claims. Claims 1, 27, and 28 are amended to clarify the claimed invention.

These changes are believed not to introduce any new matter, and their entry is respectfully requested.

Based on the above amendments and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

The Examiner is thanked for his time during a telephonic interview on February 12, 2008, during which discussions with Applicants' representative, Randall K. Baldwin, it was clarified that the 35 U.S.C. § 101 rejections of claims 1-13 have not been withdrawn, despite a statement to the contrary on page 2 of the Office Action.

Rejections under 35 U.S.C. § 101

On page 3 of the Office Action, the Examiner rejected claims 1-13 as being allegedly directed towards non-statutory subject matter. On page 4 of the Office Action, the Examiner acknowledges that claims 1-13 are directed to systems, but states that Applicants' specification "provides intrinsic evidence that these claims are directed towards software alone." Applicants disagree and respectfully traverse for the reasons stated below.

Applicants respectfully submit that the Examiner has misapplied the guidelines in making 35 U.S.C. § 101 rejections of claims 1-13. The sections of the USPTO "Interim

Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV quoted on page 2 of the Office Action address claims that recite a “computer-readable medium encoded with a computer program”, “nothing but physical characteristics of a form of energy”, “a signal encoded with functional descriptive material”, and “a signal.” Claims 1-13 recite document systems with a policy storage module and an access manager module configured to produce a useful, concrete, and tangible result. The modules recited in claims 1-13 are not forms of energy, computer-readable media encoded with a computer program, or signals. Paragraphs [0011]-[0020], [0036]-[0045], and [0093] of the specification disclose and support the document security systems as claimed in claims 1-13. Claims 1-13 recite document security systems that restrict access to secured documents, and thus provide a “useful, concrete, and tangible result” as required by 35 U.S.C. § 101.

However, to expedite prosecution, Applicants have amended claim 1 herein to recite a document security system comprising two modules, a policy module that stores at least one process-driven security policy on a computer readable medium, and an access manager module that accesses and applies the stored security policy.

Support for the amendments to claim 1 is found at least at paragraphs [0014], [0015], and [0093] of the instant specification.

The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV quoted on page 3 of the Office Action state that “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized.” Thus, claim 1 recites statutory subject matter. Claims 2-13 depend upon claim 1.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this rejection of claims 1-13.

Rejections under 35 U.S.C. § 102

On page 6 of the Office Action, the Examiner rejected claims 1-6, 8, 9, and 11-28 under 35 U.S.C. § 102(e) as being allegedly unpatentable in view of US Patent Application 2005/0028006 to Leser *et al* (20050028006 1 A1) (“Leser”). Applicants traverse for the reasons stated below.

Claims 1-6, 8, 9, and 11-13

Claims 1 recites features that distinguish over the applied reference. For example, claim 1 as amended herein recites recite a document security system for restricting access to secured documents, the system comprising:

a policy module configured to store at least one process-driven security policy on a computer readable medium, wherein the policy includes a plurality of states and transition rules, and wherein each of the states is associated with one or more access restrictions, and wherein the transition rules specify circumstances under which a secured document is to transition from one state to another;

and an access manager module configured to access the stored process-driven security policy and determine whether access to a secured document is permitted by a requestor based on the policy state associated therewith at the time access is requested and the corresponding one or more access restrictions thereof for the process-driven security policy.

On page 6 of the Office Action the Examiner asserts that Leser discloses all of the above-recited document security system features recited in claim 1. Applicants respectfully disagree and traverse for the reasons stated below.

Leser does not describe each and every element as set forth in claim 1. For example, Applicants have examined the sections of Leser cited by the Examiner and other sections, and are unable to identify a disclosure of a document security system that stores, accesses, and applies at least one process-driven security policy that includes a plurality of states and transition rules, wherein each of the states is associated with one or more access restrictions, and wherein the transition rules specify circumstances under which a secured document is to transition from one state to another, as recited in claim 1. Although Leser may disclose “a business process with two security alert states: normal and lock-down” (Leser, paragraph [0123]), Leser does not teach or suggest that the security alert states are part of a process-driven security policy that includes a plurality of states and transition rules, wherein the transition rules specify circumstances under which a secured document is to transition from one state to another, as recited in claim 1. In Leser's system, “a set of log events” may be automatically applied when a “security knob” is set to a pre-defined setting by having “an authorized administrator perform the changes to the current business process” (Leser, paragraph [0125]). In contrast the transition rules recited in claim 1 specify circumstances under which a secured document is to transition from one state to another. Leser's two business process states are not analogous to the plurality of process-driven security policy states recited in claim 1. While Leser may disclose that a “control policy” can specify usage rules that govern how protected data objects may be used, Leser's control policies are limited to specifying sets

of users and groups of users along with their respective privileges on the data objects (Leser, paragraph [0096]). In contrast, claim 1's process-driven security policy includes a plurality of states and transition rules, wherein each of the states is associated with one or more access restrictions, and wherein the transition rules specify circumstances under which a secured document is to transition from one state to another. Leser's control policy that includes users and their data object privileges within a two-state business process does not disclose a security policy that includes a plurality of states and transition rules, wherein each of the states is associated with one or more access restrictions, and wherein the transition rules specify circumstances under which a secured document is to transition from one state to another. In Leser, secured documents do not transition from one state to another as a result of a process-driven security policy; rather a business process is changed from a normal state to a lockdown state by an administrator or user (Leser, paragraphs [0125] and [0126]).

Claim 1 recites secured documents transitioning from one state to another based upon process-driven security policy states with defined access restrictions and transition rules. Leser does not disclose a system that stores, accesses, and applies a process-driven security policy having specified access restrictions and transition rules, as recited in claim 1.

Further, Applicants are unable to identify in Leser any disclosure of an access manager module that determines whether access to a secured document is permitted by a requestor based on the document state and the corresponding access restrictions, as recited in claim 1. On page 6 of the Office Action, the Examiner states that the functions of the above-recited access manager module of claim 1 are disclosed by Leser in

paragraph 0035. Although Leser may disclose a policy server that clients connect to when users on the client attempt to access protected data objects (Leser, paragraph [0035]), Leser does not disclose an access manager module that determines whether access to a secured document is permitted by a requestor based on the process-driven security policy's state and the corresponding access restrictions for the secured document, as recited in claim 1. Leser's process server contains a copy of a control policy, but as discussed above, the control policy is limited to specifying sets of users and groups of users along with their respective privileges on the data objects (Leser, paragraph [0096]).

Therefore, for at least these reasons, the applied reference does not anticipate claim 1. Dependent claims 2-13, which depend upon independent claim 1, are allowable for at least being dependent from allowable independent claim 1, in addition to their own respective distinguishing features. See *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988) and M.P.E.P. § 2143.03.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of these claims, and find them allowable over the applied reference.

Claims 14-20 and 27

Regarding the Examiner's statement on page 9 of the Office Action, in which the Examiner asserts that Leser discloses the document security method and computer readable medium recited in claims 14 and 27, respectively, Applicants disagree and traverse for the reasons stated below.

Leser does not describe each and every element as set forth in claims 14 and 27. For example, claims 14 and 27 recite a method and computer readable medium, respectively, for transitioning a secured document through a security-policy state machine having a plurality of states. Claim 14 further recites that the method includes receiving an event, determining whether the event causes a state transition for the secured document from a former state to a subsequent state, and automatically transitioning from the former state to the subsequent state of the security-policy state machine upon determination that the event causes the state transition.

On page 9 of the Office Action, the Examiner maintains that Leser discloses the above-recited features of claims 14 and 27 in paragraphs 0122 and 0123. Leser does not teach or suggest transitioning secured documents from a former state to a subsequent state, as recited in claims 14 and 27. Leser lacks any teaching of transitioning a secured document through a security policy state machine, as recited in claims 14 and 27. As discussed above, Leser's business process is limited to two states that are changed by administrators or users and Leser's control policy does not transition secured documents from one state to another. While Leser may disclose that "security officers and business process owners" in an organization can define changes to the business process that "should go into effect whenever the business process is "under attack"" (Leser, paragraph [0123]), this under attack condition changes the business process and does not change the security state of a secured document based on event occurrence, as recited in claims 14 and 27. In contrast to changing secured document states, Leser merely alters a business process (Leser, paragraph [0123]). In contrast to the above-recited document transitioning of claims 14 and 27, Leser is limited to having users define changes to the

business process that "should go into effect when a business process is "under attack" or otherwise vulnerable" (Leser, paragraph [0123]). Altering a business process manually is not equivalent to transitioning a secured document through a security policy state machine, as recited in claims 14 and 27.

Moreover, Leser does not disclose automatically transitioning a secured document's state from a former state to a subsequent state in a security-policy state machine when an event causes a state transition, as recited in claims 14 and 27. In Leser, users or administrators transition a business process from a normal state to a lockdown state based upon an occurrence of an event (Leser, paragraphs [0123-0126]), but Leser neither teaches nor suggests transitioning a secured document state based solely upon an event, as recited in claims 14 and 27. Claim 14's method and claim 27's computer readable medium transitions a secured document's state from a former state to a subsequent when an event causes a state transition. In contrast, Leser discloses that users define changes to a two-state business process that should go into effect when the business process is vulnerable (Leser, paragraph [0123]). Leser's business process transitions from one state to another only when the business process owner enters or exits the "lock-down" security state (Leser, paragraph [0124]). In contrast, claims 14 and 27 automatically transition a document's security state based on events.

Therefore, for at least these reasons, the applied reference does not anticipate claims 14 and 27. Also, at least based on their respective dependencies to claim 14, claims 15-20 should be found allowable, as well as for their additional respective distinguishing features. Accordingly, Applicants respectfully request that the Examiner

reconsider and withdraw the rejections of these claims, and find them allowable over the applied reference.

Claims 21-26 and 28

On page 12 of the Office Action the Examiner asserts that Leser discloses the document security method and computer readable medium recited in claims 21 and 28, respectively. Applicants disagree and traverse for the reasons stated below.

Leser does not describe each and every element as set forth in claims 21 and 28. For example, claims 21 and 28 recite a method and computer readable medium, respectively, that:

provide at least one process-driven security policy at a server computer, wherein the process-driven security policy is associated with a plurality of states, and wherein each of the states has distinct access restrictions;

provide a reference to the process-driven security policy to at a client computer, the reference referring to the process-driven security policy resident on the server computer;

associate the reference to an electronic document; transitioning the process-driven security policy from one state to a current state; and

determine at the server computer whether a requestor is permitted to access the electronic document, the access being based on a current state of the process-driven security policy, the current state being informed to the server computer by sending the reference to the server computer.

On pages 12 and 13 of the Office Action, the Examiner maintains that Leser discloses the above-recited features of claims 21 and 28 in paragraphs 0029, 0030, 0035, 0039, 0040, 0073, 0096, 0097, and 0208. Applicants have examined the sections of

Leser cited by the Examiner and other sections, and are unable to identify a disclosure of determining at a server computer whether a requestor is permitted to access an electronic document, the access being based on a current state of the process-driven security policy, the current state being informed to the server computer by sending the reference to the server computer, as recited in claims 21 and 28. While Leser may disclose that an objective of the invention “is to provide a method and system for temporarily changing one or more control policies and then reverting back automatically to the original settings at some point in the future” (Leser, paragraph [0030]), as discussed above, Leser's control policies are limited to specifying sets of users along with their respective privileges on data objects (Leser, paragraph [0096]). Leser's control policies are not process-driven and are not used to determine at a server computer whether a requestor is permitted to access an electronic document, the access being based on a current state of the process-driven security policy, the current state being informed to the server computer by sending the reference to the server computer, as recited in claims 21 and 28.

Therefore, for at least these reasons, the applied reference does not anticipate claims 21 and 28. Also, at least based on their respective dependencies to claim 21, claims 22-26 should be found allowable, as well as for their additional respective distinguishing features. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of these claims, and find them allowable over the applied reference.

Rejections under 35 U.S.C. § 103

On page 14 of the Office Action, claim 7 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Leser in view of the Examiner's assertion that "it would have been obvious at the time the invention was made to one of ordinary skill in the art to have a third alert state" in Leser. The Examiner concedes that Leser does not disclose a third state and second event that causes a transition from a second state to a third state, as recited in claim 7, but asserts that it would have been obvious to modify Leser based on paragraph [0127] of Leser which reads:

Those of ordinary skill in the art should recognize the methods of extending this two-setting security knob example and implementation to one that implements an n-setting security knob, for any specific n greater than 2.

While Leser may disclose that persons of skill in the art may be able to extend the two-setting security knob into more than two settings, Leser's security knob is limited to changing the state of a business policy and creating log events (Leser, paragraphs [0121-0125]). As discussed above, Leser's business policy states are not analogous to the plurality of states for the state-drive security policy recited in claim 7.

On page 15 of the Office Action, claim 10 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Leser in view of US Patent Application 2005/0028006 to Li *et al* (20050028006 A1) ("Li"). Applicants respectfully traverse these rejections and request that these rejections be withdrawn and the claims be passed to allowance.

Claims 7 and 10 depend on independent claim 1. As argued above, claim 1 is allowable over Leser. Also, at least based on their respective dependencies to claim 1, claims 7 and 10 should be found allowable, as well as for their additional respective

distinguishing features. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of these claims, and find them allowable over the applied reference.

Information Disclosure Statement

In response to the Examiner's request on page 2 of the Office Action that Applicants provide a copy of the NPL30 reference listed in the Information Disclosure Statement filed on October 29, 2007, a timely supplemental Information Disclosure Statement will be filed with the NPL30 reference.

The Examiner is thanked for consideration of the other documents listed in the Information Disclosure Statements filed October 10 and 29, 2007.


Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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